



Memorandum

To: Rick Sun, Los Angeles County Department of Public Works

*From: Jennifer Jones, CDM Smith
Matt Petty, CDM Smith*

Date: February 29, 2016

Subject: Final Daily Biological Monitoring for the Oxford Retention Basin Multiuse Enhancement Project

Introduction

This memorandum summarizes the findings of biological monitoring on February 29, 2016, for the Oxford Retention Basin Multiuse Enhancement project. Information regarding the regulatory drivers and methodology of daily biological monitoring can be found in the Biological Monitoring – Introduction and Methods for Phase 2 Construction Memo, dated June 23, 2015.

Biological monitoring was conducted by Matt Petty, CDM Smith biologist, beginning at 6:10 am and ending at 4:00 p.m. Weather conditions were dense fog to mostly cloudy. Temperatures ranged from 58°F in the morning to 71°F in the afternoon. While a mist to light rain fell intermittently in the morning, no measureable rain was recorded.

During the daily monitoring, the biologist observed activities associated with placing fill and grading on the south bank, scaffolding for the new curbs, preparing soils on the east bank for planting, excavating the south bank DG path, setting irrigation lines on the east bank, watering plants, and disposing of construction debris. All crews were overseen by the Contractor Superintendent and the Inspector of Record.

The following sections provide the biologist's field-log notes, with observations of the day's activities and wildlife presence and behavior.

Biologist's Field Log

6:10 am. Biological monitor arrives on site to conduct initial assessment. The construction trailer gate is open and several crew members wait inside cars in the staging area.

6:25 am. The initial biological survey begins. A dense fog envelops the Basin. One ring-billed gull circles the West Basin. Three American crows fly along the north fence, and four European starlings and three house finches perch in palms along Washington Boulevard. Frequent western gull fly overs are observed. Two house sparrows are observed at the northeast peninsula. One double-crested cormorant lands in the East Basin, and three American wigeon and two lesser scaup paddle

near the stormwater inlet. One Anna's hummingbird is observed hovering over the northeast corner of the site. Four lesser scaup swim and dive in the Central Basin near a raft of four American wigeon. Six bushtits, two yellow-rumped warblers, two house finches, one lesser goldfinch, and two Anna's hummingbirds are observed along the bike path. Two American coots and one black-crowned night heron are observed in the southeast channel. Three dark-eyed juncos, one yellow-rumped warbler and two Anna's hummingbirds are observed in trees near the pump house. One black phoebe perches on silt fence along the south shoreline. The female Anna's hummingbird is not on her nest. One dark-eyed junco calls from grape vines on the west bank.

7:00 am. The biological monitor gives the bio-awareness training to the construction crew. Emphasis was placed on protection of the nesting Anna's hummingbird, waterfowl, wading birds, and monarch butterflies and keeping the site clean. Workers were reminded to clean up trash in the work area prior to the end of the work day. All 17 crew members present sign the sign-in sheet. During the training, one western gull lands in the West Basin, and three rock pigeons fly over the staging area.

7:15 am. Work begins as the concrete crew heads to the east fence to construct scaffolding for the new curb. Along the east bank, a crew begins digging holes and treating soils by hand for future plantings. One snowy egret lands on the gabion peninsula near the tide gates. Fish are observed surfacing in the West Basin.

7:25 am. Two American wigeon and two lesser scaup leave the site to the west. One black phoebe is perched on the stormwater inlet. Two house sparrows are observed in residential vegetation near the northeast corner.

7:45 am. A crew begins removing the perimeter fence on the south side of the southeast channel to allow for minor trenching with a mini excavator. Soils are graded with a tractor along the east bank. Three California gulls fly over the site. One yellow-rumped warbler perches on the east fence. Ducks (i.e. 6 lesser scaup and 4 American wigeon) move slowly to the Central and West Basins, away from most of the construction activity.

8:00 am. One Allen's hummingbird hovers over the southeast channel, as a snowy egret flies in and lands below. Two American crows, one black phoebe and two yellow-rumped warblers are observed near the pump house. One mourning dove flies over the east bank, and two house finches perch in a Ficus tree in the southeast corner of the site near Yvonne Burke Park. Western gulls are frequently observed flying over the site.

8:15 am. One double-crested cormorant and two ring-billed gulls fly over the site. The female Anna's hummingbird leaves her nest and crosses Admiralty Way to feed. One yellow-rumped warbler lands in the nest tree, but does not get near the nest.

8:25 am. The female Anna's hummingbird returns to the nest and makes repairs and/or enlarges the nest. The biological monitor repairs and replaces the nest exclusion buffer tape. Two killdeer are observed on the northwest peninsula, and one western gull lands in the East Basin.

8:45 am. A crew installs pipe around the base of the easternmost observation platform. An electric crew begins wiring along the bike path. Two black phoebes and one yellow-rumped warbler are observed along the east bank. Two American coots and eight lesser scaup swim in the East Basin. Two dark-eyed juncos probe straw wattles along the southeast channel. American crow and rock pigeon flyovers increase in frequency as gull flyovers decrease.

9:10 am. A crew closes one lane of Admiralty Way. A second crew places four-foot metal bars into concrete settings along the new DG path at the east fence. Two mallards land in the West Basin. One yellow-rumped warbler and one Anna's hummingbird are observed along the bike path. One black phoebe perches on a stake on the east bank.

9:30 am. A concrete crew works on the northeast and northwest peninsula plazas. Two bufflehead dive in the Central Basin, while nearby, two hooded mergansers sleep. Three house finches fly along the north bank, and two mallards feed atop the gabion peninsula. One Allen's hummingbird hovers over the stormwater inlet, where one yellow-rumped warbler and one snowy egret are perched.

9:50 am. One western gull lands on the northwest mudflats. Six European starlings fly over the West Basin, and four American crows investigate the west bank. One great egret lands in a low pine branch overlooking the tide gates.

10:10 am. A concrete crew begins installing scaffolding for a curb along Admiralty Way, roughly 200-feet east of the hummingbird nest. One Townsend's warbler, three American crows and one yellow-rumped warbler are observed in trees near the pump house. An American crow lands in the hummingbird nest tree, which visibly agitates the female who drives it off and returns to her nest. The female is unfazed by human presence, even when the biological monitor takes photographs from directly underneath the nest.

10:30 am. One Allen's hummingbird is observed near the pine trees at the tide gates. Two American wigeon land in the Central Basin. A second Anna's hummingbird flies around the nest tree calling. The female responds and shifts her position on the nest to continually face the other hummingbird.

11:00 am. In the staging area, crews load trucks with equipment. One osprey circles and hovers above the Central and West Basins for ten minutes before leaving the site to the north. One yellow-rumped warbler perches on a temporary powerline above the west bank. Two mourning doves fly over the Central Basin. Two American crows walk along the west bank.

11:20 am. Along Admiralty Way, the DG path foundation is excavated and graded while the concrete crew continues erecting scaffolding for the curbs. One willet forages along the north mudflat near the northeast peninsula.

11:35 am. A dump truck delivers fill to the south bank of the southeast channel, where it is spread and graded. Eight lesser scaup and two American coot forage at the mouth of the channel nearby. Two western gulls land on the stormwater inlet. Four house finches fly along Admiralty Way, and

one double-crested cormorant forages in the West Basin.

12:00 pm. Crew members take staggered lunches. The biological monitor takes lunch from 12:00-1:00. The female Anna's hummingbird hovers around the nest tree before landing on the nest. The plants on the gabion peninsula are coming in nicely, but weeds are noticeable. Spot removal of undesirable species is recommended.

1:00 pm. One osprey circles the East Basin and makes several dives for fish. Coming up empty-handed, the osprey perches atop the large pine tree near the tide gates. Two house finches perch on a temporary powerline above the west bank. One great egret is observed preening atop the gabion peninsula. One house sparrow and one yellow-rumped warbler are observed in shrubs in the staging area. Two killdeer call from the northwest peninsula.

1:20 pm. Backfill and planting soils are delivered to the east bank and are stockpiled. The installation of curb scaffolding along Admiralty Way continues. One Anna's hummingbird hovers over the west bank, and two American coots forage in the Central Basin. Six lesser scaup are observed resting in the East Basin. The female hummingbird is observed on her nest.

1:35 pm. Excavating and grading the DG path on the south side of the southeast channel continues. Minor concrete work associated with the bike path fence and installation of fence structural elements take place along the east fence. Crews water plants along the east bank. The osprey leaves the site to the southeast. One western gull lands on a power pole above the northeast peninsula.

2:00 pm. Crews lay out irrigation pipe along the east bank. The osprey returns to the site and circles the East Basin twice before perching atop a nearby high rise building. Two house finches fly over the East Basin, and one black phoebe perches along the southeast channel. One willet forages along the north mudflat. Two mourning doves fly along the east fence.

2:20 pm. Winds are picking up and are more sustained. Three California gulls land in the East Basin. The female Anna's hummingbird leaves the nest and crosses Admiralty Way; she returns to the nest minutes later.

2:45 pm. The concrete crew finishes work at the south bank and moves to the northwest peninsula plaza. One crew member waters the potted plants on the west bank. Two house finches perch atop a light pole along the west bank. One mourning dove investigates the bushes and stockpiles in the staging area. One double-crested cormorant fishes along the north side of the gabion peninsula.

3:10 pm. Crews re-open the closed Admiralty Way lane and put back up the perimeter fence. A great egret catches a 4-inch fish near the tide gates, and seven lesser scaup sleep in the West Basin. The osprey returns and lands in the pine tree with the hummingbird nest. The female hummingbird remains on the nest.

3:25 pm. Fence crews stop work on the new bike path fence on the east bank and begin to pack up for the day. The osprey hovers over the Central Basin, but does not dive. It perches atop the large

pine near the tide gates. The osprey occasionally leaves the pine to circle the Basin, but quickly returns to its perch. A double-crested cormorant dries its wings on the northwest mudflat.

3:45 pm. All work stops for the day and crews prepare to leave the site. The female Anna's hummingbird is observed on her nest.

4:00 pm. The biological monitor and all crew members leave the site for the day.

Additional Observations

A single osprey, identified by a conspicuous missing primary feather, spent much of the day circling the site, occasionally diving for fish, and perching in pine trees along the south bank. No Black Skimmers or California Least Terns were observed today.

No savannah sparrows, and therefore no potential Belding's savannah sparrows, were observed today.

No planting occurred today; however, holes were dug and soils prepared for future planting.

No monarch butterflies were observed today. Cool temperatures and fog throughout the day likely contributed to no monarch observations. No butterflies or other wildlife were harmed during construction. Construction crews were reminded to be on the lookout for any monarchs that fly into active work areas.

No construction occurred within or adjacent to the active Anna's hummingbird nest in the easternmost pine tree south of the Central Basin. Nonetheless, construction crews were instructed to be cautious around the Anna's hummingbird nest. The biological monitor closely observed the nesting Anna's hummingbird female whenever possible. Prior to leaving the site the biological monitor confirmed the nesting Anna's hummingbird was in the nest. Based on the biological monitor's observations the nesting Anna's hummingbird was not disturbed by work activities nearby.

Conclusions

Based on observations made during monitoring, the following conclusions were made:

1. Biological awareness training emphasizes caution to avoid harm to birds and wildlife in and around the Basin during construction activities. In general, wildlife tends to slowly move away from an area when crews approach to conduct work activities. They return to the area once the crews move on. The crew was reminded to dispose of trash properly.
2. In general, wildlife is most active in the morning with a dramatic decrease in observed wildlife activity after 10:00 am, with the exception of American crows and gulls. Wildlife activity often increases slightly in the late afternoon.

3. No construction activities occurred in the water.
4. No monarch butterflies or any other butterflies were observed today. The weather conditions likely contributed to no butterfly observations.
5. The biological monitor observed the tolerance of the nesting Anna's hummingbird nest as he and other workers would pass by. The female was not disturbed by the human foot traffic, and showed no signs of stress when the biological monitor took photographs directly beneath the nest.
6. The biological monitor observed large numbers of fish surfacing, and several wading birds were observed catching fish. Therefore, fish are present within the Basin.

Table 1 provides a list of bird species observed during biological monitoring on February 29, 2016.

Table 1. Bird Species Observed during Biological Monitoring on February 29, 2016		
Common Name	Scientific Name	Comments
American Crow	<i>Corvus brachyrhynchos</i>	Several individuals; Very common flying overhead, perching on power line poles, and exploring the basin banks
Killdeer	<i>Charadrius vociferus</i>	2 individuals observed on the northwest mudflats
Willet	<i>Tringa semipalmata</i>	1 individual observed on the north mudflats
Osprey	<i>Pandion haliaetus</i>	1 individual observed perching in pine trees and circling the Basin
Western Gull	<i>Larus occidentalis</i>	Several individuals; Very common flying overhead
California Gull	<i>Larus californicus</i>	Several individuals observed flying overhead; not as common as western or ring-billed gulls
Ring-billed Gull	<i>Larus delawarensis</i>	Several individuals; Common flying overhead
Snowy Egret	<i>Egretta thula</i>	1-2 individuals foraging throughout the Basin
Great Egret	<i>Ardea alba</i>	1 individual observed in the West Basin
Black-crowned Night Heron	<i>Nycticorax nycticorax</i>	1 individual observed in the southeast channel
Mallard	<i>Anas platyrhynchos</i>	2 individuals foraging throughout the Basin
American wigeon	<i>Anas americana</i>	4-7 individuals observed foraging throughout the Basin
Lesser Scaup	<i>Aythya affinis</i>	10-12 individuals foraging and resting throughout the Basin
Hooded Merganser	<i>Lophodotes cucullatus</i>	2 individuals observed in the Central Basin
Bufflehead	<i>Bucephala albeola</i>	2 individuals foraging in the Central Basin
American Coot	<i>Fulica americana</i>	2 individuals foraging throughout the Basin
Double-crested Cormorant	<i>Phalacrocorax auritus</i>	3-4 individuals observed flying overhead and foraging in the Basin
Rock Pigeon	<i>Columba livia</i>	Very common; observed flying overhead and on structures to the south and west of the Basin
Mourning Dove	<i>Zenaida macroura</i>	4-6 individuals observed flying overhead

Black Phoebe	<i>Sayornis nigricans</i>	Several observed flying from perch-to-perch throughout the Basin
Yellow-rumped Warbler	<i>Setophaga coronata</i>	Several individuals observed flying from perch to perch throughout the Basin
Townsend's Warbler	<i>Setophaga townsendi</i>	1 individual observed in trees at the pump house
Dark-eyed Junco	<i>Junco hyemalis</i>	4-6 individuals observed throughout the Basin
House Finch	<i>Carpodacus mexicanus</i>	Several individuals; common in palms along Washington Boulevard
Lesser Goldfinch	<i>Spinus psaltria</i>	1 individual observed along the bike path
Bushtit	<i>Psaltiriparus minimus</i>	6 individuals observed along the bike path
House Sparrow	<i>Passer domesticus</i>	3-5 individuals observed throughout the Basin
European Starling	<i>Sturnus vulgaris</i>	6-10 individuals observed flying over the Basin
Anna's Hummingbird	<i>Calypte anna</i>	8-10 individuals observed hovering overhead or perching throughout the Basin; one active nest observed in a pine tree south of the Central Basin
Allen's Hummingbird	<i>Selasphorus sasin</i>	2-3 individuals observed throughout the Basin

The following photographs show important biological monitoring observations:



Figure 1- Active Anna's hummingbird nest tree from the southwest



Figure 2- Active Anna's hummingbird nest tree from the east



Figure 3 – Female Anna's hummingbird on her nest.



Memorandum

To: Rick Sun, Los Angeles County Department of Public Works

*From: Jennifer Jones, CDM Smith
Matt Petty, CDM Smith*

Date: March 1, 2016

Subject: Final Daily Biological Monitoring for the Oxford Retention Basin Multiuse Enhancement Project

Introduction

This memorandum summarizes the findings of biological monitoring on March 1, 2016, for the Oxford Retention Basin Multiuse Enhancement project. Information regarding the regulatory drivers and methodology of daily biological monitoring can be found in the Biological Monitoring – Introduction and Methods for Phase 2 Construction Memo, dated June 23, 2015.

Biological monitoring was conducted by Matt Petty, CDM Smith biologist, beginning at 6:15 am and ending at 4:15 p.m. Weather conditions were dense fog to partly cloudy. Temperatures ranged from 55°F in the morning to 69°F in the afternoon. While a mist to light rain fell intermittently in the morning, no measureable rain was recorded.

During the daily monitoring, the biologist observed activities associated with placing fill and grading on the east bank, scaffolding and pouring concrete for new curbs, preparing soils on the east bank for planting, placing gravel fill for the foundation of the east bank DG path, setting irrigation lines on the east bank, filling the water line trench near the pump house, and disposing of construction debris. All crews were overseen by the Contractor Superintendent and the Inspector of Record.

The following sections provide the biologist's field-log notes, with observations of the day's activities and wildlife presence and behavior.

Biologist's Field Log

6:15 am. Biological monitor arrives on site to conduct initial assessment. The construction trailer gate is open and several crew members wait inside cars in the staging area.

6:25 am. The initial biological survey begins. A dense fog envelops the Basin. Western gull flyovers are frequently observed, and California gull, ring-billed gull and American crow flyovers are occasionally observed. One American crow, five house finches and two European starlings are observed in palms along Washington Boulevard. Fresh raccoon tracks are observed in the

northwest corner of the site. One northern mockingbird is observed on a power pole in the northeast corner of the site. Two gadwall, three American coots and seven lesser scaup are observed in the East Basin. Two mourning doves fly along the east bank. One Anna's hummingbird, one Allen's hummingbird, two yellow-rumped warblers, and two lesser goldfinches are observed along the bike path. One peregrine falcon flies east-to-west over the Basin. Two black phoebes fly about the southeast channel, where a double-crested cormorant forages for fish. Three rock pigeons fly above Admiralty Way. One yellow-rumped warbler forages along the south bank. The female Anna's hummingbird is not on her nest, but returns within minutes of this initial observation. One California gull lands on the northwest mudflats. One Allen's hummingbird is observed hovering above the pine trees near the tide gates, and four American crows perch on temporary powerlines above the west bank.

7:00 am. The biological monitor gives the bio-awareness training to the construction crew. Emphasis was placed on protection of the nesting Anna's hummingbird, waterfowl, wading birds, and monarch butterflies and keeping the site clean. Workers were reminded to clean up trash in the work area prior to the end of the work day. All 17 crew members present sign the sign-in sheet.

7:15 am. Work begins as the crews load a dump truck with soils in the staging area, which is delivered to the east bank. The concrete crew begins work on the northwest peninsula plaza. One killdeer calls from the northwest mudflats. Two dark-eyed juncos call from bushes along the west bank. Frequent western gull and rock pigeon flyovers of the staging area are observed.

7:30 am. Crews spread and grade fill placed along the top of the east bank with a tractor. Two mallards land in the West Basin. One dark-eyed junco perches atop a pine tree near the tide gates. Two western gulls land on the northwest mudflats and bathe in the shallow water.

7:45 am. The fence crew digs holes for future concrete at the base of light structures along the bike path. Other crew members dig holes for sprinkler heads along the east bank. The two mallards leave the site to the southwest, and one double-crested cormorant perches on the stormwater inlet and dries its wings. Two house finches, one dark-eyed junco, and one yellow-rumped warbler are observed in trees near the pump house. One black phoebe perches on the silt fence along the southeast channel.

8:00 am. A front loader delivers soils to the east bank near the pump house from the northeast corner. Soils are spread and graded around sprinkler heads as the front loader continues to bring more fill. The female Anna's hummingbird is not on her nest. A double-crested cormorant dives for fish in the southeast channel, undisturbed by work activities 20 feet away.

8:20 am. A crew takes down the perimeter fence along Admiralty Way, roughly 200 feet east of the hummingbird nest. A second crew begins laying down irrigation pipe to the north of the pump house. Concrete crews complete work at the northwest peninsula plaza and move to the stormwater inlet. Two gadwall leave the site to the northeast. Two Anna's hummingbirds chase one another along the bike path.

8:45 am. Fairly large fish (4 to 6 inches) are observed surfacing frequently in the Basin and

southeast channel. A group of nine American crows fly over the southeast channel. With work occurring near the pump house, most songbirds have left the nearby trees. However, several yellow-rumped warblers and Anna's hummingbirds seem unfazed by nearby work and remain.

9:05 am. Jackhammering begins at the northeast peninsula plaza. Gull flyovers have decreased significantly, but American crow activity is still frequently observed. One great egret lands on the northwest mudflats near where a double-crested cormorant is drying its wings. One male mallard lands in the East Basin.

9:30 am. Soil spreading and grading continues along the east bank. Two mourning doves fly along the west bank. The great egret flies from the northwest mudflats to the tide gates, but quickly leaves the site to the west as construction and electrical crews approach the tide gates. Two killdeer are observed on the central (north) mudflat. The female Anna's hummingbird is observed on her nest.

9:50 am. Crews spread gravel fill as the foundation of the new DG path along the east fence. Soils are raked smooth along the east bank, while new holes are dug for future plantings. One osprey circles the East and Central Basins twice before leaving the site to the south. Two house finches are observed perched on the south fence.

10:05 am. Minor trenching with a mini excavator occurs along the new DG path in the northeast corner. The cement truck arrives at the northwest peninsula plaza and begins pouring new curb. The osprey returns and catches a large fish (~8" long) off the end of the gabion peninsula. It leaves the site to the south with the fish in its talons. Two yellow-rumped warblers, one dark-eyed junco and one Anna's hummingbird are observed along the bike path. One mourning dove flies over the Central Basin, and two house finches fly over the East Basin.

10:30 am. The water truck is used to wet down the east bank for dust control. Four bushtits are observed in the two pines in the northeast corner. One black phoebe perches on the stormwater inlet. Three American coots forage in the southeast channel. One monarch is observed flying along the southeast channel.

10:50 am. The cement truck moves to the northeast corner to pour the new curb. Crews continue to spread and smooth the gravel foundation of the DG path along the east fence. Several crew members continue to spread and grade soils on the east bank. Two yellow-rumped warblers and two house finches are observed along the bike path. One dark-eyed junco forages along the eastern shoreline. The osprey returns and circles the East Basin. It dives five times in unsuccessful attempts to catch fish. Lesser scaup and American coots swim in tight formation as the osprey flies overhead.

11:05 am. Crews take down some of the east fence along the bike path to fill in the gap between the new DG path and the bike path with gravel fill. On its sixth dive, the osprey catches a large fish (~12") near the end of the gabion peninsula. The osprey flies off-site to the southwest, but circles back and feeds atop a large high-rise building across Admiralty Way. Lesser scaup and American coot relax and disperse throughout the Basin. The female Anna's hummingbird is observed on her

nest.

11:35 am. The cement truck finishes work in the northeast corner and heads to the south bank along Admiralty Way to pour curb there. One double-crested cormorant lands in the East Basin and begins to fish. One snowy egret lands on the tide gate railing. One Cassin's kingbird perches atop a palm and two mourning doves perch atop light poles along Washington Boulevard.

12:00 pm. Crew members take staggered lunches, with the cement crew waiting until the curb pour along the south bank is completed. The biological monitor takes lunch from 12:00-1:00. The female Anna's hummingbird is observed on her nest.

1:00 pm. The concrete pour of the south bank curbs continues. A Bobcat is used to stockpile soils at the old dewatering tanks in the northwest corner. One osprey circles the West Basin and makes several unsuccessful dives for fish before leaving the site to the south. Seven lesser scaup were sleeping in the West Basin, but the osprey has them alert and in a tightly packed formation. They are joined by one American coot seeking shelter.

1:20 pm. Crews resume working on the new DG path and bike path along the east fence. Two killdeer are observed on the northwest mudflats. One black phoebe and one house finch are observed perched along the west bank. The osprey returns and catches a very large fish (~16") on its first dive in the Central Basin. It is almost immediately harassed by an American crow and leaves the site to the southwest with its catch.

1:40 pm. The concrete truck finishes the south bank curb pour and heads to the staging area to be cleaned. The concrete crew treats and shapes the recently-poured curb. Water levels in the Basin appear to be increasing, suggesting the tide gates have been opened. Winds are beginning to pick up in intensity. The female Anna's hummingbird is not on her nest.

1:50 pm. The female Anna's hummingbird returns to her nest. One double-crested cormorant swims in the Central Basin. A second female Anna's hummingbird perches on a recently-planted tree in the southwest corner. The concrete crew takes lunch.

2:10 pm. A front loader takes construction debris from the staging area to the dumpster in the northeast corner. Three osprey are observed soaring and calling out together over the Basin; one appears to be the resident osprey (it is missing the same feathers). The three osprey flush a group of 12 rock pigeons off the Killer Shrimp restaurant roof. One Allen's hummingbird perches on a light pole near the northwest peninsula plaza.

2:30 pm. The three osprey soar high out over the Marina. Western and ring-billed gull flyovers increase. The osprey and gulls are riding thermals as strong, constant wind rolls in off the coast. One male Anna's hummingbird perches on a recently-planted tree along the north bank roughly five feet from the biological monitor. A yellow-rumped warbler perches on silt fence nearby. Water levels in the Basin are up to the base of the silt fence in many areas.

2:50 pm. The mini excavator is used to fill and compact the water line trench near the pump house.

A crew begins putting the east perimeter fence back up. Two American crows and one yellow-rumped warbler are observed in trees above the trench-filling work. One black phoebe, two American coots and one double-crested cormorant are observed in the southeast channel nearby.

3:10 pm. A crew removes construction debris from the southeast channel outlet. The concrete crew removes scaffolding from the south bank curb. Two European starlings fly west above Washington Boulevard. One double-crested cormorant leaves the site to the southeast. The female Anna's hummingbird is observed on her nest.

3:30 pm. A crew works on the irrigation system at the northeast peninsula plaza. Two western gulls land on the northwest mudflat near two killdeer. The two killdeer display nesting behavior (i.e. alarm calls and attempts to draw the gulls away from the area). No nest or eggs are observed. Last week, the biological monitor searched the mudflats for a nest and found none. A detailed search will be conducted tomorrow to make sure no nest is present. Five American crows probe the north bank, and one double-crested cormorant swims in the West Basin near the tide gates.

3:40 pm. Except for the concrete crew, all work stops for the day and the construction contractor crews prepare to leave the site. The concrete crew removes scaffolding from the curb in the northeast corner bike plaza.

4:00 pm. The concrete crew stops work for the day and prepares to leave the site.

4:15 pm. The biological monitor and all crew members leave the site for the day.

Additional Observations

One osprey spent much of the day circling the site and catching fish. The osprey would take its catch off-site, often to the top of one of the high-rise buildings across Admiralty Way. In the afternoon, three osprey were observed soaring over the Basin and calling to one another. One was the resident osprey, identified by its missing tail feather. This is a departure from previous observations, when only one osprey was seen at the site at a time.

No Black Skimmers or California Least Terns were observed today. No savannah sparrows, and therefore no potential Belding's savannah sparrows, were observed.

No planting occurred today; however, holes were dug and soils prepared for future planting.

One monarch butterfly was observed today. Cool temperatures, dense fog in the morning, and strong winds in the afternoon likely contributed to few monarch observations. No butterflies or other wildlife were harmed during construction. Construction crews were reminded to be on the lookout for any monarchs that fly into active work areas.

No construction occurred within or adjacent to the active Anna's hummingbird nest in the easternmost pine tree south of the Central Basin. Nonetheless, construction crews were instructed

to be cautious around the Anna's hummingbird nest. The biological monitor closely observed the nesting Anna's hummingbird female whenever possible. Based on the biological monitor's observations the nesting Anna's hummingbird was not disturbed by work activities nearby.

Conclusions

Based on observations made during monitoring, the following conclusions were made:

1. Biological awareness training emphasizes caution to avoid harm to birds and wildlife in and around the Basin during construction activities. In general, wildlife tends to slowly move away from an area when crews approach to conduct work activities. They return to the area once the crews move on. The crew was reminded to dispose of trash properly.
2. In general, wildlife is most active in the morning with a dramatic decrease in observed wildlife activity after 10:00 am, with the exception of American crows and gulls. Wildlife activity often increases slightly in the late afternoon.
3. No construction activities occurred in the water.
4. Only one monarch butterfly was observed today. The weather conditions likely contributed to the low number of butterfly observations.
5. The biological monitor observed the tolerance of the nesting Anna's hummingbird nest as he and other workers would pass by. The female was not disturbed by the human foot traffic, and showed no signs of stress when the biological monitor took photographs directly below the nest.
6. The biological monitor observed large numbers of fish surfacing. The osprey caught three relatively large (8 to 16-inches long) fish today. Therefore, fish are present within the Basin.

Table 1 provides a list of bird species observed during biological monitoring on March 1, 2016.

Table 1. Bird Species Observed during Biological Monitoring on March 1, 2016		
Common Name	Scientific Name	Comments
American Crow	<i>Corvus brachyrhynchos</i>	Several individuals; Very common flying overhead, perching on power line poles, and exploring the basin banks
Killdeer	<i>Charadrius vociferus</i>	2 individuals observed on the northwest mudflats
Osprey	<i>Pandion haliaetus</i>	1 individual observed circling the Basin and diving for fish; 2 additional individuals observed flying overhead
Peregrine Falcon	<i>Falco peregrinus</i>	1 individual observed flying overhead
Western Gull	<i>Larus occidentalis</i>	Several individuals; Very common flying overhead
California Gull	<i>Larus californicus</i>	Several individuals observed flying overhead; not as common as western or ring-billed gulls
Ring-billed Gull	<i>Larus delawarensis</i>	Several individuals; Common flying overhead
Snowy Egret	<i>Egretta thula</i>	1 individual foraging throughout the Basin

Great Egret	<i>Ardea alba</i>	1 individual observed in the West Basin
Mallard	<i>Anas platyrhynchos</i>	2-3 individuals foraging throughout the Basin
Gadwall	<i>Anas strepera</i>	2 individuals observed foraging in the East Basin
Lesser Scaup	<i>Aythya affinis</i>	7 individuals foraging and resting in the Basin
American Coot	<i>Fulica americana</i>	3 individuals foraging throughout the Basin
Double-crested Cormorant	<i>Phalacrocorax auritus</i>	4-6 individuals observed flying overhead and foraging in the Basin
Rock Pigeon	<i>Columba livia</i>	Very common; observed flying overhead and on structures to the south and west of the Basin
Mourning Dove	<i>Zenaida macroura</i>	5-7 individuals observed flying overhead
Northern Mockingbird	<i>Mimus polyglottos</i>	1 individual perched atop a power pole in the northeast corner of the site
Cassin's Kingbird	<i>Tyrannus vociferans</i>	1 individual observed in a palm along Washington Boulevard
Black Phoebe	<i>Sayornis nigricans</i>	Several observed flying from perch-to-perch throughout the Basin
Yellow-rumped Warbler	<i>Setophaga coronata</i>	Several individuals observed flying from perch to perch throughout the Basin
Dark-eyed Junco	<i>Junco hyemalis</i>	4-6 individuals observed throughout the Basin
House Finch	<i>Carpodacus mexicanus</i>	Several individuals; common in palms along Washington Boulevard
Lesser Goldfinch	<i>Spinus psaltria</i>	2 individuals observed along the bike path
Bushtit	<i>Psaltiriparus minimus</i>	4 individuals observed in the northeast pine trees
European Starling	<i>Sturnus vulgaris</i>	2-4 individuals observed along Washington Boulevard
Anna's Hummingbird	<i>Calypte anna</i>	5-7 individuals observed hovering overhead or perching throughout the Basin; one active nest observed in a pine tree south of the Central Basin
Allen's Hummingbird	<i>Selasphorus sasin</i>	2-3 individuals observed throughout the Basin

Mr. Rick Sun
March 1, 2016
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The following photographs show important biological monitoring observations:



Figure 1- Female Anna's hummingbird sitting on her nest



Figure 2- Female Anna's hummingbird perched on a recently-planted tree



Figure 3 – Three osprey circling high above the Central Basin



Figure 4 – Resident osprey circling low over the Basin looking for fish



Memorandum

To: Rick Sun, Los Angeles County Department of Public Works

*From: Jennifer Jones, CDM Smith
Matt Petty, CDM Smith*

Date: March 2, 2016

Subject: Final Daily Biological Monitoring for the Oxford Retention Basin Multiuse Enhancement Project

Introduction

This memorandum summarizes the findings of biological monitoring on March 2, 2016, for the Oxford Retention Basin Multiuse Enhancement project. Information regarding the regulatory drivers and methodology of daily biological monitoring can be found in the Biological Monitoring – Introduction and Methods for Phase 2 Construction Memo, dated June 23, 2015.

Biological monitoring was conducted by Matt Petty, CDM Smith biologist, beginning at 6:00 am and ending at 3:45 p.m. Weather conditions were dense fog to partly cloudy. Temperatures ranged from 52°F in the morning to 66°F in the afternoon. While a mist to light rain fell intermittently in the morning, no measureable rain was recorded.

During the daily monitoring, the biologist observed activities associated with preparing soils and planting on the east bank, digging fence holes along the south bank, wiring for and installation of new DG path lights, placing soils over the irrigation system in the northeast and northwest peninsula plaza plant beds, digging a trench near the tide gate pines, stabilizing the south bank with structural fill, grading and shaping the new DG path at the top of the south bank, delivery of fill to the staging area, and disposing of construction debris. All crews were overseen by the Contractor Superintendent and the Inspector of Record.

The following sections provide the biologist's field-log notes, with observations of the day's activities and wildlife presence and behavior.

Biologist's Field Log

6:00 am. Biological monitor arrives on site to conduct initial assessment. The construction trailer gate is open and several crew members wait inside cars in the staging area.

6:15 am. The initial biological survey begins. A dense fog envelops the Basin. One dark-eyed junco perches atop the large pine tree near the tide gates above a black-crowned night heron perched on the tide gate railing. Two killdeer are observed on the northwest mudflats. The biological monitor

conducts a thorough search of the mudflat, but no killdeer nest is found. The occasional western gull and infrequent California and ring-billed gull flyovers are observed. Far less gull activity is observed than on previous days. One house sparrow is observed on the north fence, and three house finches call from a palm along Washington Boulevard. One yellow-rumped warbler hops among the new plantings on the northeast peninsula. Two American wigeon sleep near the stormwater inlet. Eight lesser scaup and two American coots forage in the East Basin. One Allen's hummingbird, one Anna's hummingbird and two yellow-rumped warblers are observed along the bike path. Two Townsend's warblers, two Anna's hummingbirds, two dark-eyed juncos and one house finch are observed in trees near the pump house. Four American crows probe the banks of the southeast channel. One crow carries twigs off to the southeast towards Yvonne Burke Park. The female Anna's hummingbird is observed on her nest, and two house finches perch in the adjacent pine tree.

6:45 am. The biological monitor gives the bio-awareness training to the construction crew. Emphasis was placed on protection of the nesting Anna's hummingbird, waterfowl, wading birds, and monarch butterflies and keeping the site clean. Workers were reminded of the heavy rain forecasted for the upcoming weekend, and that all E&S controls need to be in place beforehand. All 20 crew members present sign the sign-in sheet.

7:00 am. Work begins as a front loader takes debris from the staging area to the northeast dumpster. Dump trucks deliver fill to the staging area stockpiles. A crew places soil around the sprinkler heads in the northwest peninsula plaza beds. Two mallards lands in the Central Basin. Four house finches, two house sparrows, and two European starlings fly along Washington Boulevard.

7:15 am. The fog is so dense that you cannot see the far end of the Basin. A crew begins raking and spreading soils on the east bank near the pump house. The fence crew works on the DG path fence near the bike path. All the ducks in the Basin (i.e. 2 mallard, 2 American wigeon and 8 lesser scaup) bathe and preen in the shallows off of the north mudflat.

7:30 am. A large roller is used to compact fill near the pump house. Mist and light rain falls, but not in measurable amounts. The fog is keeping most birds grounded, but songbirds, including two yellow-rumped warblers, one dark-eyed junco, and one Anna's hummingbird, call from trees along the bike path.

7:50 am. A tractor delivers soils from the northeast stockpiles to the pump house area. Droplets form on pine tree needles as a result of the dense fog. The female Anna's hummingbird is observed on her nest. Two house finches and one Anna's hummingbird fly along the east fence. Two mourning doves fly over the southeast channel.

8:10 am. Crews take down the perimeter fence along Admiralty Way from the 100-foot nesting buffer boundary west to the tide gates. The female Anna's hummingbird remains on the nest undisturbed. Three western gulls circle low over the East Basin.

8:30 am. A mini excavator and Bobcat need to be moved through the nesting buffer to the tide

gates. The biological monitor instructs the operators to hug the silt fence near the south shoreline, roughly 35 feet north of the nest. This is farther from the nest than the heavy traffic along Admiralty Way, which is 25 feet south of the nest. The female Anna's hummingbird shows no signs of stress and remains on her nest.

8:50 am. The female Anna's hummingbird leaves her nest to the west and returns five minutes later. One yellow-rumped warbler is observed in the pine adjacent to the nest. One dark-eyed junco perches in the pine tree near the tide gates. One willet is observed foraging along the north mudflat. Two American wigeon land in the East Basin.

9:10 am. Workers continue placing fill around the northwest peninsula plaza and along the east bank. Along the south bank, a crew spreads fill and grades the top of bank for the new DG path. The fog is slowly lifting, which results in more gull, rock pigeon, and American crow flyovers being observed. Two mallards sleep on the gabion peninsula near the tide gates. One dark-eyed junco is observed in the sea lavender under the pine trees near the tide gates.

9:30 am. The fence crew is measuring distances between the recently-installed fence poles along the north and west banks. Work delivering and spreading soils with the tractor on the east bank ends; soils continue to be worked by hand. The electrical crew hand drills holes for light structures along the south bank. Two house sparrows are observed in bushes in the southwest corner. One mallard flies over the West Basin.

9:50 am. A tractor is loaded with plants from the west bank and delivers them to the east bank. Three American crows perch on temporary power lines above the west bank. One belted kingfisher perches on a power line above the north mudflats. One black phoebe flies around the stormwater inlet. Two American crows perch in the large tree near the tide gates and are harassed by a female Allen's hummingbird. The biologist searches the tree thoroughly for a nest, but none is found.

10:10 am. Planting begins on the east bank to the north of the pump house. The female Anna's hummingbird is initially not observed on her nest; however, she returns and perches on the edge of the nest peering downward. This could possibly mean that the eggs are hatching or have hatched. Two American wigeon leave the site to the southwest. Five Canada geese fly over the staging area and head toward the Marina. Three European starlings and one mourning dove perch on a powerline in the northwest corner of the site.

10:30 am. Fill for the foundation of the DG path is stockpiled at the tide gates. A flock of 13 cedar waxwings perch in a palm tree along Admiralty Way. An American crow exhibits nest building behavior – it picks up sticks from the west bank and carries them into a tree near the Killer Shrimp restaurant. One ring-billed gull lands on the north mudflat and bathes in the shallow water.

10:50 am. A large truck delivers more plants, which are unloaded and staged on the west bank. Recent plantings on the east bank are watered as crews test the irrigation system. Four mallards circle the West Basin and staging area before departing to the northwest. Three western gulls land on the northern mudflats, causing the ring-billed gull to leave the site. The fog has largely burned off.

11:10 am. Stockpiles in the staging area are shored up and watered down. Fill continues to be delivered to the south bank as the new DG path takes shape. The female Anna's hummingbird flies back to her nest as the biological monitor approaches.

11:25 am. A crew member sweeps the gutter along Admiralty Way – an example of E&S control measures being implemented. A tractor picks up another load of plants from the west bank and delivers them to the east bank. One double-crested cormorant fishes in the East Basin. One western gull lands in the southeast channel for a drink. Two house finches perch on the south fence along the southeast channel.

11:35 am. One osprey circles the East and Central Basins before perching atop the pine adjacent to the Anna's hummingbird nest tree. After a few minutes, it circles the Basin again for roughly 10 minutes before perching atop the high-rise building across Admiralty Way. Two tree swallows fly along the bike path. The fence and electrical crews continue working near the northeast corner pine trees.

12:00 pm. All crews and the biological monitor take lunch. The female Anna's hummingbird is observed on her nest.

1:00 pm. Several dump trucks deliver fill to the staging area. Fill placement and grading for the new DG path continues at the top of the south bank along Admiralty Way. Two killdeer are observed on the northwest mudflats. Seven lesser scaup are observed sleeping in the West Basin. Two American coots forage near the stormwater inlet. The female Anna's hummingbird is observed on her nest.

1:20 pm. A mini excavator is used to dig a trench near the tide gate pine trees. The trench extends into the fenced-off tree protection area around the tree, but the crew says the Engineer has allowed for the encroachment. There is no noticeable root damage to any of the three pines, and no wildlife is observed in the vicinity. A crew installs wiring for DG path lighting 25 to 100 feet east of the nesting Anna's hummingbird. The biological monitor carefully observed the work activities and the nest; the female hummingbird stays on the nest throughout the duration of the work and appears undisturbed. An osprey flies over the southeast channel and perches atop a high-rise building across Admiralty Way.

1:35 pm. Crews continue to plant the east bank. The osprey leaves its perch and soars out over the Basin. The lesser scaup hurriedly huddle together in a tight formation. The osprey lands on the large pine near the tide gates. The operator of the mini excavator digging a trench nearby temporarily stops work until the osprey resumes soaring. The osprey catches a relatively large (~8-inch) fish on its fish dive in the Central Basin north of the gabion peninsula. It leaves the site to the southwest with its catch.

1:50 pm. The electrical crew finishes its wiring work inside the nesting buffer. The female Anna's hummingbird leaves its nest and flies to the southwest. It returns to its nest three minutes later. A peregrine falcon flushes a flock of 27 rock pigeons to the southwest of the site. It dives and catches

a pigeon over the staging area.

2:10 pm. Crews test the recently-installed irrigation system on the east bank and water the day's plantings. A second crew spreads soils around the northeast peninsula plant beds. Fence and electric crews stop work for the day and prepare to leave the site. The occasional American crow and western gull flyover is observed. One black phoebe perches on silt fence along the east shoreline. One Eurasian collared dove perches on the parapet wall in the northwest corner of the site.

2:30 pm. Work is occurring in only two areas on site: planting continues on the east bank and the new DG path in the southwest corner is graded. One yellow-rumped warbler perches on a temporary power line above the west bank. Two killdeer remain on the northwest mudflats. Although they have been there all day, no nesting or courtship behavior has been observed. Two American crows probe the west bank, and two ring-billed gulls fly east-to-west over the site. One snowy egret lands on the tide gate railing. The osprey returns and circles the Basin several times, but does not dive for fish.

2:50 pm. Crews set the perimeter fence along Admiralty Way back up and re-open the closed lane to traffic. A tractor takes construction debris from the staging area and east bank and deposits it into the dumpster in the northeast corner. The osprey is chased off the site to the southeast by two American crows. One double-crested cormorant swims in the Central Basin.

3:15 pm. A double-crested cormorant leaves the site to the west. The osprey returns and makes several unsuccessful dives for fish. On its fourth dive, the osprey catches a relatively large (~10-inch) fish off of the end of the gabion peninsula. It flies off-site to the southwest with its catch.

3:25 pm. Construction crews stop work for the day and prepare to leave the site. Two house finches are observed in bushes in the staging area. A group of approximately 65 gulls soars high on thermals to the north of the site.

3:45 pm. The biological monitor and all crew members leave the site for the day.

Additional Observations

One osprey, identified by its missing tail feather, spent much of the day circling the site and catching fish. The osprey would take its catch off-site, often to the top of one of the high-rise buildings across Admiralty Way. This same osprey has been seen all week and is likely the same resident individual observed previously in the Basin.

No Black Skimmers or California Least Terns were observed today. No savannah sparrows, and therefore no potential Belding's savannah sparrows, were observed.

Construction crews planted the east bank just to the north of the pump house.

No monarch butterflies were observed today. Cool temperatures, dense fog in the morning, and strong winds in the afternoon likely contributed to the lack of monarch observations. No butterflies or other wildlife were harmed during construction. Construction crews were reminded to be on the lookout for any monarchs that fly into active work areas.

Approximately 30 minutes of construction activities occurred within the active Anna's hummingbird nest in the easternmost pine tree south of the Central Basin. Activities included wiring for lighting along the new DG path and moving small construction equipment along the south bank to the tide gates. All activities were conducted under the watchful eye of the biological monitor, and no signs of distress from the female hummingbird were observed. She remained on the nest and often showed no signs that she acknowledged the work being conducted nearby. Nonetheless, construction crews were instructed to be cautious around the Anna's hummingbird nest. The biological monitor closely observed the nesting Anna's hummingbird female whenever possible. Based on the biological monitor's observations the nesting Anna's hummingbird was not disturbed by work activities nearby.

Conclusions

Based on observations made during monitoring, the following conclusions were made:

1. Biological awareness training emphasizes caution to avoid harm to birds and wildlife in and around the Basin during construction activities. In general, wildlife tends to slowly move away from an area when crews approach to conduct work activities. They return to the area once the crews move on. The crew was reminded to dispose of trash properly.
2. In general, wildlife is most active in the morning with a dramatic decrease in observed wildlife activity after 10:00 am, with the exception of American crows and gulls. Wildlife activity often increases slightly in the late afternoon.
3. No construction activities occurred in the water.
4. No monarch butterflies were observed today. The weather conditions likely contributed to the absence of butterfly observations.
5. The biological monitor observed the tolerance of the nesting Anna's hummingbird nest as he and other workers would pass by. The female was not disturbed by the human foot traffic or when minor construction activities occurred nearby.
6. The osprey caught three relatively large (8 to 10 inches long) fish today. Therefore, fish are present within the Basin.

Table 1 provides a list of bird species observed during biological monitoring on March 2, 2016.

Table 1. Bird Species Observed during Biological Monitoring on March 2, 2016		
Common Name	Scientific Name	Comments
American Crow	<i>Corvus brachyrhynchos</i>	Several individuals; Very common flying overhead, perching on power line poles, and exploring the basin banks
Belted Kingfisher	<i>Megaceryle alcyon</i>	1 individual perched on a powerline over the Central Basin
Killdeer	<i>Charadrius vociferus</i>	2 individuals observed on the northwest mudflats
Osprey	<i>Pandion haliaetus</i>	1 individual observed fishing in the Basin and perching in pine trees
Peregrine Falcon	<i>Falco peregrinus</i>	1 individual hunting pigeons over the staging area
Western Gull	<i>Larus occidentalis</i>	Several individuals; Very common flying overhead
California Gull	<i>Larus californicus</i>	Several individuals observed flying overhead; not as common as western or ring-billed gulls
Ring-billed Gull	<i>Larus delawarensis</i>	Several individuals; Common flying overhead
Snowy Egret	<i>Egretta thula</i>	1 individual foraging in the West Basin
Black-crowned Night Heron	<i>Nycticorax nycticorax</i>	1 individual perched on the tide gate railing
Canada Goose	<i>Branta canadensis</i>	5 individuals flying overhead
Mallard	<i>Anas platyrhynchos</i>	7-9 individuals foraging throughout the Basin and flying overhead
American Wigeon	<i>Anas americana</i>	2-4 individuals resting throughout the Basin
Lesser Scaup	<i>Aythya affinis</i>	8 individuals foraging and resting in the Basin
American Coot	<i>Fulica americana</i>	2 individuals foraging throughout the Basin
Double-crested Cormorant	<i>Phalacrocorax auritus</i>	1-2 individuals observed foraging in the Basin
Rock Pigeon	<i>Columba livia</i>	Very common; observed flying overhead and on structures to the south and west of the Basin
Mourning Dove	<i>Zenaida macroura</i>	2-3 individuals observed flying overhead
Eurasian Collared Dove	<i>Streptopelia decaocto</i>	1 individual perched on the parapet wall in the northwest corner of the site
Tree Swallow	<i>Tachycineta bicolor</i>	Two individuals observed flying overhead
Black Phoebe	<i>Sayornis nigricans</i>	Several observed flying from perch-to-perch throughout the Basin
Yellow-rumped Warbler	<i>Setophaga coronata</i>	Several individuals observed flying from perch to perch throughout the Basin
Townsend's Warbler	<i>Setophaga townsendii</i>	2 individuals observed in trees near the pump house
Dark-eyed Junco	<i>Junco hyemalis</i>	4-6 individuals observed throughout the Basin
House Finch	<i>Carpodacus mexicanus</i>	Several individuals; common in palms along Washington Boulevard
Cedar Waxwing	<i>Bombycilla cedrorum</i>	13 individuals observed in a palm along Washington Boulevard

House Sparrow	<i>Passer domesticus</i>	3-5 individuals observed along the north and west banks
European Starling	<i>Sturnus vulgaris</i>	3-5 individuals observed along Washington Boulevard
Anna's Hummingbird	<i>Calypte anna</i>	4-6 individuals observed hovering overhead or perching throughout the Basin; one active nest observed in a pine tree south of the Central Basin
Allen's Hummingbird	<i>Selasphorus sasin</i>	1-2 individuals observed throughout the Basin

The following photographs show important biological monitoring observations:



Figure 1- Female Anna's hummingbird tending to her nest



Figure 2- Osprey fishing in the Basin and flying off with its catch



Figure 3 – Planting along the east bank



Figure 4 – Trench digging within the tree protection area near the tide gates



Memorandum

To: Rick Sun, Los Angeles County Department of Public Works

From: Jennifer Jones, CDM Smith
Matt Petty, CDM Smith

Date: March 3, 2016

Subject: Final Daily Biological Monitoring for the Oxford Retention Basin Multiuse Enhancement Project

Introduction

This memorandum summarizes the findings of biological monitoring on March 3, 2016, for the Oxford Retention Basin Multiuse Enhancement project. Information regarding the regulatory drivers and methodology of daily biological monitoring can be found in the Biological Monitoring – Introduction and Methods for Phase 2 Construction Memo, dated June 23, 2015.

Biological monitoring was conducted by Matt Petty, CDM Smith biologist, beginning at 6:15 am and ending at 3:45 p.m. Weather conditions were mostly to partly cloudy. Temperatures ranged from 54°F in the morning to 66°F in the afternoon. No measureable rain was recorded.

During the daily monitoring, the biologist observed activities associated with preparing soils and planting on the east bank, pouring concrete along the south bank for DG (decomposed granite) path light bases, pouring concrete at both peninsulas and in the northeast corner for light bases, digging a bioswale trench and installing a drainage pipe near the tide gate pines, and grading and shaping the new DG (decomposed granite) path at the top of the south bank. All crews were overseen by the Contractor Superintendent and the Inspector of Record.

The following sections provide the biologist's field-log notes, with observations of the day's activities and wildlife presence and behavior.

Biologist's Field Log

6:15 am. Biological monitor arrives on site to conduct initial assessment. The construction trailer gate is open and several crew members wait inside cars in the staging area.

6:25 am. The initial biological survey begins. Two American crows and one yellow-rumped warbler are observed on the west bank. One American crow is also observed on the north fence. One house sparrow and five house finches fly along Washington Boulevard; three European starlings perch in palm trees nearby. Two killdeer are observed on the north mudflat near the northwest peninsula. Eight lesser scaup and two American wigeon are observed in the East Basin. Frequent western gull

and occasional California and ring-billed gull flyovers are observed. Two house finches and one yellow-rumped warbler forage near the stormwater inlet. Two lesser goldfinches and one Anna's hummingbird perch in the northeast corner pines. Two yellow-rumped warblers and two dark-eyed juncos are observed along the bike path. Two American coots and one black phoebe are observed along the southeast channel. One Townsend's warbler, one yellow-rumped warbler, and one Anna's hummingbird call from trees near the pump house. Four rock pigeons fly along Admiralty Way, as eleven California gulls fly west-to-east overhead. Two yellow-rumped warblers hop along the south bank. Five bushtits and two mourning doves fly over the East Basin. One dark-eyed junco calls from the pines near the tide gates. The female Anna's hummingbird is observed on her nest.

7:00 am. The biological monitor gives the bio-awareness training to the construction crew. Emphasis was placed on protection of the nesting Anna's hummingbird, waterfowl, wading birds, and monarch butterflies and keeping the site clean. Workers were reminded of the heavy rain forecasted for the upcoming weekend, and that all E&S controls need to be in place beforehand. All 21 crew members present sign the sign-in sheet. One double-crested cormorant lands in the West Basin.

7:15 am. Work begins as a crew excavates a trench in the southwest corner by hand. Electrical crews resume work along the new DG path in the northeast corner. The perimeter fence along Admiralty Way near the tide gate pines is taken down. A tractor picks up plants staged along the west bank and transports them to the east bank. Two lesser scaup land in the Central Basin. Two Allen's hummingbirds are observed near the tide gate pines.

7:30 am. A crew prepares the east bank soils for planting. The electrical crew digs holes for light bases along the DG path at the top of the south bank. The female Anna's hummingbird hovers over the nest tree before flying off; she returns less than one minute later. Two mourning doves fly over the Central Basin. One tree swallow circles above the northwest corner of the site.

7:45 am. One male American wigeon lands in the East Basin. One yellow-rumped warbler lands in a pine next to the tide gates. One snowy egret lands on the gabion peninsula near the tide gates, and is followed minutes later by a great egret landing 10 feet away.

8:00 am. Crews hand dig a trench for the bioswale pipe and prepare the pipe for installation near the tide gate pines. One black-crowned night heron flies east-to-west over the Basin. One Cooper's hawk lands in a palm tree along Washington Boulevard. One dark-eyed junco and one Allen's hummingbird are observed in the tide gate pine trees. One Eurasian collared dove flies over the West Basin and lands in a eucalyptus tree in the Fanta Sea Yacht Club parking lot.

8:15 am. The Cooper's hawk is harassed by two American crows until it leaves the palm and flies over the Central Basin toward the Marina. Two tree swallows fly above the northwest mudflats. One dark-eyed junco calls from the grape vines on the west bank. A group of eleven rock pigeons fly over the staging area.

8:35 am. Crews close one lane of Admiralty Way. Fill is delivered to the bioswale trench. One male

mallard lands in the East Basin.

9:00 am. A crew installs piping in the southwest corner trench. Water levels in the Basin have risen dramatically and cover almost the entirety of both mudflats. This is beneficial for the restoration of the mudflats. Two mallards fly over the staging area to the Marina. One male Anna's hummingbird hovers over the tide gates. Two additional lesser scaup land in the East Basin, bringing the total number of lesser scaup to twelve. The female Anna's hummingbird is observed on her nest. Gull activity is decreasing, and American crow activity is increasing.

9:15 am. A concrete truck arrives at the south bank along Admiralty Way to pour concrete for light fixture bases along the DG path. One great egret and one snowy egret leave the site to the south. Two killdeer avoid the rising waters by moving from the mudflats to the northwest peninsula.

9:40 am. Mechanized grading begins in the northwest corner. One great egret lands on the stormwater inlet. One house finch perches on the north fence. Fish are observed surfacing regularly; possibly new individuals entering the Basin with the tide gates open.

10:00 am. Planting continues northward along the east bank near the stormwater inlet. Water levels in the Basin begin to slowly recede. Two American wigeon leave the site to the southwest. Two yellow-rumped warblers fly over the Central Basin.

10:20 am. The electrical crew and cement truck head to the northwest peninsula plaza to pour concrete for light fixtures. Crews fill the bioswale with rock and gravel to cover the pipe and fill the trench. An osprey circles the East Basin and dives for fish; it catches a 6-inch fish and proceeds to feed atop a nearby high-rise building.

10:45 am. A large truck delivers plants to the northeast gate; plants are staged under the northeast corner pine trees. The concrete truck and electrical crew move to the northeast peninsula plaza to pour concrete for light fixtures. One monarch is observed flying along the south bank. One great blue heron flies in from the southwest and lands at the stormwater inlet. One double-crested cormorant swims in the Central Basin. The female Anna's hummingbird is observed on her nest.

11:00 am. The concrete truck and electrical crew move to the northeast corner to pour concrete for light bases. The osprey finishes feeding and resumes fishing in the Basin. After several unsuccessful dives, it returns to its perch atop the high-rise building. The female Anna's hummingbird chases a second Anna's hummingbird away from the nest tree.

11:20 am. A second concrete truck arrives along Admiralty Way, and the electrical crew oversees the concrete pour of light bases along the top of the south bank. Two tractors are used to grade the top of bank in the northeast corner. The osprey leaves its perch and flies away to the east.

11:45 am. Crews are placing fill and grading the top of the south bank near the tide gates for the new DG path. Another crew unloads a large truck delivering plants to the west bank. Two osprey, including the resident individual, soar high over the Basin. The female Anna's hummingbird is not on her nest.

12:00 pm. Most of the construction crew members take lunch. However, the electrical crew continues pouring and shaping concrete for the DG path lights on the south bank. The concrete pour extends to within 50 to 100 feet east of the Anna's hummingbird nest. Since this work is occurring within the buffer, the biological monitor shadows the work and keeps a close eye for any disturbance to the female or nest. The Anna's hummingbird sits on her nest and shows no signs of stress. A great blue heron leaves the site to the west.

12:15 pm. The female Anna's hummingbird leaves her nest to forage at a high-rise balcony, and returns to the nest five minutes later. This is normal behavior and it does not appear to be influenced by work activities occurring to the east. The two osprey are joined by a third and all three ride thermals high above the Basin.

12:30 pm. The concrete truck along Admiralty Way finishes pouring concrete and leaves for the staging area for cleaning. The electrical crew remain within the nesting buffer area to treat and shape the concrete. The concrete pour in the northeast corner also ends and that truck heads to the staging area. The female Anna's hummingbird remains on her nest undisturbed. Construction crews that took lunch at noon return to spreading fill in the southwest corner. A Cooper's hawk soars high above the residences east of the Basin. Winds begin picking up.

12:45 pm. Crews unload plants from a large truck and stage them on the west bank. Two red-tailed hawks join the three osprey soaring high above the East Basin. When one osprey circles low over the Basin, the resident osprey swoops down and chases it off. A great egret lands at the end of the gabion peninsula.

1:00 pm. Concrete treatment of the light bases within the nesting buffer ends and the biological monitor takes lunch. The female Anna's hummingbird leaves the nest to the west and returns three minutes later. The two remaining osprey and the two red-tailed hawks soar off to the east. One monarch and one cabbage white butterfly are observed flying along the southeast channel. Two tree swallows fly over the Central Basin.

1:45 pm. The biological monitor returns from lunch. The electrical crew finishes work for the day and prepares to leave the site. Planting has resumed along the east bank near the stormwater inlet. Two house sparrows are observed in the grape vines on the west bank. Two killdeer call from the northwest mudflats. One snowy egret is observed perched on the tide gates, and one great egret rests a few feet away on the gabion peninsula. The female Anna's hummingbird is not on her nest.

2:10 pm. Work continues depositing fill and grading the top of bank for the new DG path near the tide gates. Eleven lesser scaup and two American coots forage in the East Basin. The resident osprey returns and dives unsuccessfully for fish. The female Anna's hummingbird is observed back on her nest.

2:30 pm. Crews begin putting the south perimeter fence along Admiralty Way back up. The closed Admiralty Way lane is swept clean. Plants staged on the west bank are watered. The osprey is chased off-site by an American crow. One dark-eyed junco perches in the pine tree next to the

hummingbird nest tree.

2:50 pm. The resident osprey returns and dives unsuccessfully for fish. Two mallards fly over the West Basin to the Marina. Minutes later, two mallards land in the East Basin. Two dark-eyed juncos and two house finches are observed in the potted plants on the west bank.

3:10 pm. Crews re-open the closed Admiralty Way lane. A pair of crows continue to obtain nest material (e.g. sticks) from the west bank and take it to their nest across Admiralty Way in a large eucalyptus tree in the Fanta Sea Yacht Club parking lot. The osprey leaves the site to the southeast. The female Anna's hummingbird is observed on her nest.

3:25 pm. Construction crews stop work for the day and prepare to leave the site.

3:45 pm. The biological monitor and all crew members leave the site for the day.

Additional Observations

One osprey, identified by its missing tail feather, spent much of the day circling the site and catching fish. The osprey would take its catch off-site, often to the top of one of the high-rise buildings across Admiralty Way. This same osprey has been seen all week and is likely the same resident individual observed previously in the Basin. As on a previous day, the resident osprey was joined by two additional ospreys. The trio soared on thermals high above the Basin; however, when one of the other ospreys circled low over the Basin, the resident chased it off.

No Black Skimmers or California Least Terns were observed today. No savannah sparrows, and therefore no potential Belding's savannah sparrows, were observed.

Construction crews planted the east bank from just to the north of the pump house to the northeast corner.

Two monarch butterflies were observed today. Cool temperatures, cloudy conditions, and strong winds in the afternoon likely contributed to few monarch observations. No butterflies or other wildlife were harmed during construction. Construction crews were reminded to be on the lookout for any monarchs that fly into active work areas.

Approximately 60 minutes of construction activities occurred within the active Anna's hummingbird nest in the easternmost pine tree south of the Central Basin. Activities included pouring concrete bases for lighting along the new DG path on the south bank. Work never came within 50-feet of the nest. All activities were conducted under the watchful eye of the biological monitor, and no signs of distress from the female hummingbird were observed. She spent most of her time on the nest and showed no signs that she aware of the work being conducted nearby. Nonetheless, construction crews were instructed to be cautious around the Anna's hummingbird nest. The biological monitor closely observed the nesting Anna's hummingbird female whenever

possible. Based on the biological monitor's observations the nesting Anna's hummingbird was not disturbed by work activities nearby.

Conclusions

Based on observations made during monitoring, the following conclusions were made:

1. Biological awareness training emphasizes caution to avoid harm to birds and wildlife in and around the Basin during construction activities. In general, wildlife tends to slowly move away from an area when crews approach to conduct work activities. They return to the area once the crews move on. The crew was reminded to dispose of trash properly.
2. In general, wildlife is most active in the morning with a dramatic decrease in observed wildlife activity after 10:00 am, with the exception of American crows and gulls. Wildlife activity often increases slightly in the late afternoon.
3. No construction activities occurred in the water.
4. Two monarch butterflies were observed today. The cool weather conditions likely contributed to the small number of butterfly observations.
5. The biological monitor observed the tolerance of the nesting Anna's hummingbird nest as he and other workers would pass by. The female was not disturbed by the human foot traffic or when minor construction activities occurred nearby.
6. The number of fish surfacing and caught by osprey and wading birds confirm that fish are entering the Basin through the tide gates.
7. One osprey, identified by its missing tail feather, has been observed fishing in the Basin every day this week. The time spent in the Basin and its aggressive behavior toward other osprey trying to fish in the Basin suggest this osprey is a resident and considers the Basin its territory.

Table 1 provides a list of bird species observed during biological monitoring on March 3, 2016.

Table 1. Bird Species Observed during Biological Monitoring on March 3, 2016		
Common Name	Scientific Name	Comments
American Crow	<i>Corvus brachyrhynchos</i>	Several individuals; Very common flying overhead, perching on power line poles, and exploring the basin banks
Killdeer	<i>Charadrius vociferus</i>	2 individuals observed on the mudflats
Osprey	<i>Pandion haliaetus</i>	1 individual observed fishing in the Basin and perching in pine trees; 2 additional individuals soaring overhead
Red-tailed Hawk	<i>Buteo jamaicensis</i>	2 individuals soaring overhead
Cooper's Hawk	<i>Accipiter cooperii</i>	1-2 individuals observed in palms along Washington Boulevard and soaring overhead
Western Gull	<i>Larus occidentalis</i>	Several individuals; Very common flying

		overhead
California Gull	<i>Larus californicus</i>	Several individuals observed flying overhead; not as common as western or ring-billed gulls
Ring-billed Gull	<i>Larus delawarensis</i>	Several individuals; Common flying overhead
Great Egret	<i>Ardea alba</i>	1-2 individuals foraging throughout the Basin
Snowy Egret	<i>Egretta thula</i>	1-2 individuals foraging throughout the Basin
Black-crowned Night Heron	<i>Nycticorax nycticorax</i>	1 individual observed flying overhead
Great Blue Heron	<i>Ardea herodias</i>	1 individual observed on the stormwater inlet
Mallard	<i>Anas platyrhynchos</i>	5-7 individuals foraging throughout the Basin and flying overhead
American Wigeon	<i>Anas americana</i>	3 individuals swimming throughout the Basin
Lesser Scaup	<i>Aythya affinis</i>	12 individuals foraging and resting in the Basin
American Coot	<i>Fulica americana</i>	2 individuals foraging throughout the Basin
Double-crested Cormorant	<i>Phalacrocorax auritus</i>	1-2 individuals observed foraging in the Basin
Rock Pigeon	<i>Columba livia</i>	Very common; observed flying overhead and on structures to the south and west of the Basin
Mourning Dove	<i>Zenaida macroura</i>	4 individuals observed flying overhead
Eurasian Collared Dove	<i>Streptopelia decaocto</i>	1 individual observed flying overhead
Tree Swallow	<i>Tachycineta bicolor</i>	3-5 individuals observed flying overhead
Black Phoebe	<i>Sayornis nigricans</i>	1 individual observed near the southeast channel
Yellow-rumped Warbler	<i>Setophaga coronata</i>	Several individuals observed flying from perch to perch throughout the Basin
Townsend's Warbler	<i>Setophaga townsendii</i>	1 individual observed in trees at the pump house
Bushtit	<i>Psaltirparus minimus</i>	5 individuals observed flying over the East Basin
Dark-eyed Junco	<i>Junco hyemalis</i>	6-8 individuals observed throughout the Basin
House Finch	<i>Carpodacus mexicanus</i>	Several individuals; common in palms along Washington Boulevard
Lesser Goldfinch	<i>Spinus psaltria</i>	2 individuals observed in the northeast pines
House Sparrow	<i>Passer domesticus</i>	2-3 individuals observed along the north and west banks
European Starling	<i>Sturnus vulgaris</i>	3 individuals observed along Washington Boulevard
Anna's Hummingbird	<i>Calypte anna</i>	4-6 individuals observed hovering overhead or perching throughout the Basin; one active nest observed in a pine tree south of the Central Basin
Allen's Hummingbird	<i>Selasphorus sasin</i>	2-3 individuals observed near the tide gates

The following photographs show important biological monitoring observations:



Figure 1- Female Anna's hummingbird sitting on her nest



Figure 2- Planting along the east bank



Figure 3 – Installing concrete bases for lights along the new DG path at the top of the south bank (Note yellow nest buffer tape)



Figure 4 – American crow taking nesting material from the west bank to its nest in a eucalyptus tree in the Fanta Sea parking lot across Admiralty Way



Memorandum

To: Rick Sun, Los Angeles County Department of Public Works

*From: Jennifer Jones, CDM Smith
Matt Petty, CDM Smith*

Date: March 4, 2016

Subject: Final Daily Biological Monitoring for the Oxford Retention Basin Multiuse Enhancement Project

Introduction

This memorandum summarizes the findings of biological monitoring on March 4, 2016, for the Oxford Retention Basin Multiuse Enhancement project. Information regarding the regulatory drivers and methodology of daily biological monitoring can be found in the Biological Monitoring – Introduction and Methods for Phase 2 Construction Memo, dated June 23, 2015.

Biological monitoring was conducted by Matt Petty, CDM Smith biologist, beginning at 6:15 am and ending at 3:30 p.m. Weather conditions were mostly to partly cloudy. Temperatures ranged from 55°F in the morning to 65°F in the afternoon. No measureable rain was recorded.

During the daily monitoring, the biologist observed activities associated with preparing soils and planting on the east bank, installing scaffolding for new curb along the southeast channel, installing an irrigation main near the tide gates, compacting the new DG (decomposed granite) path at the top of the south bank, digging a trench to install lighting infrastructure along the south bank, fill delivery to the staging area, and disposing of construction debris. All crews were overseen by the Contractor Superintendent and the Inspector of Record.

The following sections provide the biologist's field-log notes, with observations of the day's activities and wildlife presence and behavior.

Biologist's Field Log

6:15 am. Biological monitor arrives on site to conduct initial assessment. The construction trailer gate is open and several crew members wait inside cars in the staging area.

6:30 am. The initial biological survey begins. One dark-eyed junco is observed in the plants along the west bank. Intense western gull activity is observed to the north and west of the site. Occasional California and ring-billed gull flyovers are observed, and two California gulls land on the northern mudflats. Two house finches, two European starlings, and one yellow-rumped warbler perch in palms along Washington Boulevard. Two mallards forage in the Central Basin off the end

of the gabion peninsula. Ten lesser scaup forage in the East Basin. Three house finches and two lesser goldfinches are observed in the northeast corner of the site. One yellow-rumped warbler hops along the east bank. One Allen's hummingbird, one Anna's hummingbird and three dark-eyed juncos are observed along the bike path. Two American coots forage in the southeast channel. Four yellow-rumped warblers, four bushtits and one Anna's hummingbird perch in trees near the pump house. One great egret lands on the stormwater inlet. The female Anna's hummingbird is not on her nest. Two dark-eyed juncos call from the pines near the tide gates. The snowy egret is perched on the tide gate railing.

7:00 am. The biological monitor gives the bio-awareness training to the construction crew. Emphasis was placed on protection of the nesting Anna's hummingbird, waterfowl, wading birds, and monarch butterflies and keeping the site clean. Workers were reminded of the heavy rain forecasted for the upcoming weekend, and that all E&S controls need to be in place beforehand. All 20 crew members present sign the sign-in sheet.

7:15 am. Work begins as the perimeter fence along Admiralty Way near the tide gate pines is taken down. Planting begins on the east bank near the northeast pine trees. A front loader is used to shore up the stockpiles in the staging area. One great egret flies from the stormwater inlet to the gabion peninsula in the West Basin. Two American wigeon and one lesser scaup join the other ducks in the East Basin. A group of six rock pigeons fly over the West Basin. Very little American crow activity is observed, with only one flyover observed this morning.

7:30 am. The electrical crew uses a mini excavator to dig a trench for lighting infrastructure at the top of the south bank along the southeast channel. Dump trucks deliver fills and soils to the staging area. One Allen's hummingbird hovers over the southwest corner. Unlike on previous days, no killdeer are observed on the mudflats. Five mallards fly over the staging area and land to the northwest. Two hooded mergansers land in the East Basin.

7:45 am. Several electrical crew members head to the northeast peninsula plaza to work on lighting fixtures there. A pickup truck delivers equipment to the southeast corner gate, where the concrete crew begins installing scaffolding for the new DG path curb. The female Anna's hummingbird is observed on her nest. Two hooded mergansers and two American wigeon leave the site to the northwest.

8:00 am. Crews excavate a trench near the tide gates for an irrigation main. American crow activity increases in the Basin. Two killdeer land on the northwest mudflats, and two mallards leave the site to the northwest. One yellow-rumped warbler probes the sea lavender below the tide gate pine trees, in which two American crows perch.

8:20 am. Crews sweep and clean the staging area and the adjacent parking lot. Two Eurasian collared doves perch on light poles along Admiralty Way. One dark-eyed junco and two house sparrows are observed in bushes in the staging area. The female Anna's hummingbird is observed on her nest.

8:45 am. The concrete crew installs scaffolding for a new curb around the top of bank of the

southeast channel. Two yellow-rumped warblers, one Townsend's warbler, one Anna's hummingbird, and one dark-eyed junco are observed in trees near the pump house above the work area.

9:00 am. Crews close one lane of Admiralty Way to traffic. One black phoebe is observed flying from perch-to-perch along the southeast channel. Five American wigeon fly over the Central Basin to the northwest. One American crow carries nesting material off-site to the southeast towards Yvonne Burke Park.

9:20 am. Crews wet down the south bank to prepare for future grading work. Three mallards fly over the staging area to the Marina. The female Anna's hummingbird is observed on her nest.

9:45 am. Crews begin installing the main irrigation line in the trench near the tide gates. One Anna's hummingbird hovers over the west bank, and one yellow-rumped warbler perches on a temporary power line above the west bank. One willet is observed foraging along the north mudflats. Two house finches fly over the Central Basin.

10:05 am. Crews use a Bobcat to remove a small amount of soil and stockpile it near the boat ramp so that the concrete crew can continue installing scaffolding for the new DG path curb. Three yellow-rumped warblers and three house finches are observed in trees near the pump house. Two mourning doves fly over the West Basin.

10:30 am. Soils are brought to the east bank where they are spread and prepared for planting. Several Anna's hummingbirds are observed frequently flying from the trees near the bike path to forage across Admiralty Way. Two dark-eyed juncos are observed along the east fence. One monarch butterfly is observed flying in the northeast corner of the site.

10:50 am. The electrical crew finishes digging the trench at the top of the south bank and begin installing wiring and light infrastructure by hand. Crews start mechanized grading and shaping of the south bank to the west of the nesting buffer. The Anna's hummingbird is observed on her nest. One osprey is observed perched atop a high-rise building across Admiralty Way.

11:15 am. A front loader is used to bring fill to the irrigation main trench near the tide gates. One double-crested cormorant is observed fishing in the West Basin, as one great egret and one snowy egret watch from the gabion peninsula nearby. One peregrine falcon flies east-to-west over Admiralty Way and flushes a group of 17 rock pigeons from the roof of the Killer Shrimp restaurant.

11:35 am. Dump trucks deliver more fill to the staging area, and stockpiles are shaped using a tractor. Crews continue to plant the east bank just north of the pump house. The osprey leaves its perch and begins fishing in the Basin. On its third dive, the osprey catches a large (~12 inches) fish and flies off with its catch to the southwest. Two mourning doves perch atop temporary power poles in the northwest corner.

12:00 pm. Construction crews break for lunch. The concrete crew finishes its work and prepares to leave the site. Two house finches perch atop the construction trailer. One yellow-rumped warbler

calls from a bush in the southwest corner of the site. The female Anna's hummingbird is not on her nest.

1:00 pm. The biological monitor returns from lunch. Dump trucks continue to deliver fill to the staging area. Crews shore up the stockpiles with a tractor and clean the gutters around the staging area. Planting resumes along the east bank. Work continues installing the irrigation main near the tide gates. Two house finches and one yellow-rumped warbler perch on temporary powerlines over the west bank.

1:20 pm. A tractor picks up potted plants on the west bank and delivers them to the planting area on the east bank. Crews fill the irrigation main trench as the pipe is installed. The electrical crew finishes its work and prepares to leave the site. One great egret is observed on the gabion peninsula near the tide gates. Eight lesser scaup and two American coot forage in the East Basin. One monarch butterfly is observed flying along the south shoreline. The female Anna's hummingbird is observed on her nest.

1:40 pm. The only work still continuing on-site is the planting along the east bank and the installation of the irrigation main in the southwest corner of the site near the tide gates. Crews use a heavy roller to compact the DG path and irrigation main trench. The female Anna's hummingbird is not on her nest. One house finch perches on the south fence. No killdeer have been observed thus far this afternoon on the mudflats. Very few gull, crow and/or pigeon flyovers are observed.

2:00 pm. Rock is deposited around the bioswale standpipe riser near the tide gates. Dump trucks continue to deliver more fill to the staging area. The irrigation pipe is installed and crew backfill the last portions of the trench. A total of 3-4 recently active rodent burrows are found among the sea lavender beneath the easternmost tide gate pines.

2:15 pm. Two killdeer are observed mating on the northwest mudflats. The pair copulate several times before separating and remaining roughly 20 feet apart. Two mourning doves perch on the west bank parapet wall. The raft of ten lesser scaup move into the West Basin to forage.

2:35 pm. Crews finish filling the irrigation trench and compacting the DG path near the tide gates in the southwest corner of the site. Crews begin putting the south perimeter fence along Admiralty Way back up. One American crow lands in the lower branches of the Anna's hummingbird nest tree. The female hunkers down on her nest and stays still. One double-crested cormorant lands in the Central Basin.

2:50 pm. Crews re-open the closed Admiralty Way lane. The staging area is swept clean and wet down. One western gull lands on the northwest peninsula. Two American crows probe the banks in the northwest corner of the site. One Allen's hummingbird is observed hovering near the tide gate pines.

3:10 pm. Crews finish planting activities on the east bank. All crews stop work for the day and prepare to leave the site.

3:30 pm. The biological monitor and all crew members leave the site for the day.

Additional Observations

One osprey, identified by its missing tail feather, spent some of the afternoon circling the site and catching fish. The osprey would take its catch off-site to feed. This same osprey has been seen all week and is likely the same resident individual observed previously in the Basin.

No Black Skimmers or California Least Terns were observed today. No savannah sparrows, and therefore no potential Belding's savannah sparrows, were observed either.

Construction crews planted the east bank from just to the north of the pump house to the northeast corner.

Two monarch butterflies were observed today. Cool temperatures and cloudy conditions likely contributed to few monarch observations. No butterflies or other wildlife were harmed during construction. Construction crews were reminded to be on the lookout for any monarchs that fly into active work areas.

No construction activities occurred within the buffer of the active Anna's hummingbird nest in the easternmost pine tree south of the Central Basin. Nonetheless, construction crews were instructed to be cautious around the Anna's hummingbird nest. The biological monitor closely observed the nesting Anna's hummingbird female whenever possible. Based on the biological monitor's observations the nesting Anna's hummingbird was not disturbed by work activities nearby.

Conclusions

Based on observations made during monitoring, the following conclusions were made:

1. Biological awareness training emphasizes caution to avoid harm to birds and wildlife in and around the Basin during construction activities. In general, wildlife tends to slowly move away from an area when crews approach to conduct work activities. They return to the area once the crews move on. The crew was reminded to dispose of trash properly.
2. In general, wildlife is most active in the morning with a dramatic decrease in observed wildlife activity after 10:00 am, with the exception of American crows and gulls. Wildlife activity often increases slightly in the late afternoon.
3. No construction activities occurred in the water.
4. Two monarch butterflies were observed today. The weather conditions likely contributed to the small number of butterfly observations.
5. The biological monitor observed the tolerance of the nesting Anna's hummingbird nest as he and other workers would pass by. The female was not disturbed by the nearby human foot

traffic.

6. The number of fish surfacing and caught by osprey and wading birds confirm that fish are entering the Basin through the tide gates.
7. One osprey, identified by its missing tail feather, has been observed fishing in the Basin every day this week. The time spent in the Basin and its aggressive behavior toward other osprey trying to fish in the Basin suggest this osprey is a resident and considers the Basin its territory.
8. The two killdeer that have been seen showing site fidelity to the northwest mudflats were observed mating today. Therefore, it is likely that the killdeer will be looking for a good nesting site nearby.

Table 1 provides a list of bird species observed during biological monitoring on March 4, 2016.

Table 1. Bird Species Observed during Biological Monitoring on March 4, 2016		
Common Name	Scientific Name	Comments
American Crow	<i>Corvus brachyrhynchos</i>	Several individuals; Very common flying overhead, perching on power line poles, and exploring the basin banks
Willet	<i>Tringa semipalmata</i>	1 individual observed on the north mudflats
Killdeer	<i>Charadrius vociferus</i>	2 individuals observed on the northwest mudflats; the two were observed mating
Osprey	<i>Pandion haliaetus</i>	1 individual observed fishing in the Basin
Western Gull	<i>Larus occidentalis</i>	Several individuals; Very common flying overhead
California Gull	<i>Larus californicus</i>	Several individuals observed flying overhead; not as common as western or ring-billed gulls
Ring-billed Gull	<i>Larus delawarensis</i>	Several individuals; Common flying overhead
Great Egret	<i>Ardea alba</i>	1 individual foraging throughout the Basin
Snowy Egret	<i>Egretta thula</i>	1 individual foraging throughout the Basin
Mallard	<i>Anas platyrhynchos</i>	10-12 individuals foraging throughout the Basin and flying overhead
American Wigeon	<i>Anas americana</i>	5-7 individuals foraging throughout the Basin and flying overhead
Lesser Scaup	<i>Aythya affinis</i>	11 individuals foraging and resting in the Basin
Hooded Merganser	<i>Lophodytes cucullatus</i>	2 individuals swimming in the East Basin
American Coot	<i>Fulica americana</i>	2 individuals foraging throughout the Basin
Double-crested Cormorant	<i>Phalacrocorax auritus</i>	1-2 individuals observed foraging in the Basin
Rock Pigeon	<i>Columba livia</i>	Very common; observed flying overhead and on structures to the south and west of the Basin
Mourning Dove	<i>Zenaida macroura</i>	4-6 individuals observed flying overhead and perched on various structures
Eurasian Collared Dove	<i>Streptopelia decaocto</i>	2 individuals observed along Admiralty Way
Black Phoebe	<i>Sayornis nigricans</i>	1 individual observed near the southeast channel
Yellow-rumped	<i>Setophaga coronata</i>	Several individuals observed flying from perch to

Warbler		perch throughout the Basin
Townsend's Warbler	<i>Setophaga townsendii</i>	1 individual observed in trees at the pump house
Bushtit	<i>Psaltiriparus minimus</i>	4 individuals observed in trees at the pump house
Dark-eyed Junco	<i>Junco hyemalis</i>	8-10 individuals observed throughout the Basin
House Finch	<i>Carpodacus mexicanus</i>	Several individuals; common in palms along Washington Boulevard
Lesser Goldfinch	<i>Spinus psaltria</i>	2 individuals observed in the northeast corner
House Sparrow	<i>Passer domesticus</i>	2 individuals observed in the staging area
European Starling	<i>Sturnus vulgaris</i>	2 individuals observed in palms along Washington Boulevard
Anna's Hummingbird	<i>Calypte anna</i>	5-7 individuals observed hovering overhead or perching throughout the Basin; one active nest observed in a pine tree south of the Central Basin
Allen's Hummingbird	<i>Selasphorus sasin</i>	2-3 individuals observed throughout the Basin

The following photographs show important biological monitoring observations:



Figure 1- Female Anna's hummingbird sitting on her nest



Figure 2- Two killdeer on the northwest mudflats moments after being observed mating



Figure 3 – Planting along the slopes of the east bank is almost completed

Mr. Rick Sun
March 4, 2016
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Figure 4 – Recently active rodent burrows are observed among sea lavender under the tide gate pine trees



Memorandum

To: Rick Sun, Los Angeles County Department of Public Works

*From: Jennifer Jones, CDM Smith
Matt Petty, CDM Smith*

Date: March 5, 2016

Subject: Final Daily Biological Monitoring for the Oxford Retention Basin Multiuse Enhancement Project

Introduction

This memorandum summarizes the findings of biological monitoring on March 5, 2016, for the Oxford Retention Basin Multiuse Enhancement project. Information regarding the regulatory drivers and methodology of daily biological monitoring can be found in the Biological Monitoring – Introduction and Methods for Phase 2 Construction Memo, dated June 23, 2015.

Biological monitoring was conducted by Matt Petty, CDM Smith biologist, beginning at 6:10 am and ending at 3:10 p.m. Weather conditions were mostly cloudy all day. Temperatures ranged from 54°F in the morning to 66°F in the afternoon. Overnight, a light rain fell as evidenced by wet pavement and ponding; the QSP indicated it was not a measureable amount. Between 1:15 pm and 1:35 pm, a light rain fell intermittently resulting in, at most, trace measureable rain.

During the daily monitoring, the biologist observed activities associated with preparing soils and planting on several banks, hand digging a trench near the tide gates, filling and compacting the new DG (decomposed granite) path in the northwest corner, filling and reinforcing the south bank of the southeast channel, weed removal, excess concrete removal along the curbs on the south bank, placing soils at the northeast and northwest peninsula plazas, covering stockpiles, fill delivery to the staging area, and disposing of construction debris. All crews were overseen by the Contractor Superintendent and the Inspector of Record.

The following sections provide the biologist's field-log notes, with observations of the day's activities and wildlife presence and behavior.

Biologist's Field Log

6:10 am. Biological monitor arrives on site to conduct initial assessment. The construction trailer gate is closed and locked, and several crew members wait inside cars in the adjacent parking lot.

6:25 am. The initial biological survey begins. One Anna's hummingbird perches atop the

construction trailer. Two American crows probe the stockpiles in the staging area. Two killdeer stand at the water's edge on the northwest mudflats; no nest or nesting behavior is observed. One house sparrow perches on the north fence, and one male Anna's hummingbird sits in a newly-planted tree on the north bank. One great blue heron is observed fishing in the Central Basin. One California gull is preening along the north mudflats. Large fish are observed surfacing frequently. Four house finches are observed in palms along Washington Boulevard. A second great blue heron lands on the stormwater inlet. One American crow, one Allen's hummingbird, and two yellow-rumped warblers are observed in the northeast corner. Two American coots, 17 lesser scaup, and three American wigeon forage in the East Basin. One snowy egret perches on the floating boom at the mouth of the southeast channel. Two yellow-rumped warblers, two house finches, and one tree swallow are observed along the bike path. Two mallards forage in the southeast channel. Two dark-eyed juncos, one American crow, one yellow-rumped warbler, and one Townsend's warbler are observed in trees near the pump house. One great egret flies west-to-east over the Basin. A second great egret lands on the stormwater inlet. Two tree swallows dart between the high-rises across Admiralty Way. The female Anna's hummingbird is not on her nest. One dark-eyed junco and one Allen's hummingbird are observed at the tide gate pine trees.

7:00 am. The biological monitor gives the bio-awareness training to the construction crew. Emphasis was placed on protection of the nesting Anna's hummingbird, waterfowl, wading birds, and monarch butterflies and keeping the site clean. Workers were reminded of the heavy rain forecasted for the upcoming weekend, and that all E&S controls need to be in place beforehand. All 23 crew members present sign the sign-in sheet. Four American crows probe the northwest mudflat; the killdeer alternate between trying to drive them and lure them away from the area. No nest or other nesting behavior is observed.

7:15 am. Work begins as soil preparation and planting activities start on the east bank just north of the pump house. A crew of three informs the biological monitor that they are planning to weed the gabion peninsula where a snowy egret and great egret are resting. The biological monitor informs them to just approach slowly and the egrets will likely move elsewhere. Both egrets fly farther down the gabion peninsula as the crew approaches. The occasional western, California and ring-billed gull flyovers are observed.

7:30 am. Minor excavation associated with the irrigation pipe occurs in the southwest corner near the tide gates. Crews take down the perimeter fence in the northwest corner. The south bank is wet down to prepare for future work. A light rain/mist falls, but is not measureable. The snowy egret lands roughly 50 feet from where crews are weeding along the gabion peninsula. Three American wigeon leave the site to the west.

7:45 am. Fill is delivered to the northwest corner to establish the correct elevation for the new DG path. Along the north bank, soils are prepared for planting. One great blue heron flies in and lands on the stormwater inlet. Four gadwall circle low over the Basin before leaving the site to the northwest. Large numbers of mostly western and California gulls fly inland from the coast, possibly to avoid the impending storm.

8:00 am. Crews remove debris from the top of bank in the southeast corner to prepare for bank fill

and reinforcement with chain-link and terra-mesh. A mini excavator is used to spread fill for the new DG path in the northwest corner. One Anna's hummingbird hovers over the southeast channel. One great blue heron leaves the site to the south. One tree swallow flies over the East Basin. The female Anna's hummingbird is observed on her nest.

8:20 am. A tractor is used to grade and smooth the top of bank in the southeast corner. Four rock pigeons and two American crows are observed flying along Admiralty Way. Two yellow-rumped warblers and two Anna's hummingbirds perch in trees near the pump house. One monarch butterfly is observed flying over the East Basin.

8:40 am. Dump trucks bring fill to the staging area, and the stockpiles are shored up using a front loader. The female Anna's hummingbird is observed on her nest. One ring-billed gull lands on the northwest mudflats. The killdeer on the northwest mudflats appear undisturbed by work going on in the nearby northwest corner of the site. Four lesser scaup fly west-to-east over the Basin, and one double-crested cormorant is observed fishing in the West Basin.

9:00 am. Work in the northwest corner of the site continues with placing fill and compacting it to form the base of the new DG path. Grasses that were previously planted along the north bank are starting to send up flowing stalks, indicating that they are healthy, growing and ready to reproduce. Two mallards land in the Central Basin, and four bufflehead forage in the East Basin. Two house sparrows hop around the northwest peninsula.

9:20 am. A crew begins clearing weeds from around the pump house. Two more mallards land in the East Basin. One double-crested cormorant dries its wings on the stormwater inlet. Two house finches are observed flying around the northeast corner. Gull activity has decreased significantly.

9:40 am. Fill is delivered to the southeast corner to assist with elevating the south bank of the southeast channel. Crews finish weeding along the gabion peninsula. The front loader picks up structural fill from the tide gate stockpiles and delivers it to the DG path crew in the northwest corner. Two mourning doves rest along the west bank. The majority of the roughly 30 ducks in the Basin are resting on a small mudflat next to the stormwater inlet. The female Anna's hummingbird is not on her nest.

10:00 am. Planting is completed for the day along the north bank and crews begin planting along the west bank. Four European starlings fly over the staging area. Two mallards leave the site to the northwest and land in the nearby canals. Crows are observed picking up nesting materials from the northwest peninsula and carrying them to their nest across Admiralty Way in the Fanta Sea parking lot.

10:20 am. Planting continues in the southwest corner near the tide gates. A crew continues to install, compact and roll the foundation for the DG path in the northwest corner. A two-man crew begins removing excess concrete from previously-poured curb 25 to 100 feet east of the Anna's hummingbird nest. The biological monitor accompanies the crew and watches the nest. The female is on the nest and shows no signs of stress or disturbance. Two killdeer fly to the gabion peninsula in the Central Basin. One mourning dove flies along the north fence, and one dark-eyed junco is

observed in bushes along the west bank.

10:35 am. The two-man crew removing excess concrete from previously-poured curb continues working to the east, outside of the Anna's hummingbird nesting buffer. The nesting female leaves the nest, but returns minutes later. The four bufflehead leave the site to the northwest.

10:50 am. Crews continue to add fill, compact and reinforce the south bank of the southeast channel. One great egret forages in the southeast channel, approximately 25 feet from the active work area. Winds are beginning to pick up in intensity. The two killdeer are displaying nesting behavior on the gabion peninsula in the Central Basin near a spool of discarded wire. Behavior includes the female circling the same small spot and laying down there for extended periods.

11:10 am. Planting is completed on the east bank, and the crew heads to the south bank of the southeast channel to remove weeds. Crews also complete work for the day on the DG path in the northwest corner. Those crews move to the northwest peninsula plant beds and begin placing fill around sprinklers there. Five American crows probe the recently-planted east bank. Two additional American crows harass the killdeer on the gabion peninsula.

11:30 am. Crews prepare to plant the south bank within the Anna's hummingbird nesting buffer. One crew member places chalk outlines on the bank to show where certain species will be planted, and sets out the potted plants in those areas.

11:50 am. All construction crews and the biological monitor take lunch. One double-crested cormorant is fishing in the Central Basin. One snowy egret is perched on the tide gates. Two western gulls land in the Central Basin, which causes the ring-billed gull on the north mudflats to leave to the east.

12:40 pm. Crews resume working on the northwest peninsula placing soils in plant beds. Another crew works in the southwest corner hand digging a trench upslope of the tide gate pines. A third crew begins planting inside the Anna's hummingbird nesting buffer, roughly 100 feet to the northwest of the nest. The nesting female remains on her nest and does not appear disturbed. The osprey is observed circling the East Basin. It catches a large fish on its first dive and carries its catch off-site to the southeast. Two mallards land in the East Basin. Two killdeer are observed in the same spot as earlier on the gabion peninsula in the Central Basin.

12:55 pm. Crews continue to fill, compact and reinforce the bank on the south side of the southeast channel. The nesting female Anna's hummingbird leaves her nest for less than one minute before returning. Eleven lesser scaup and two American coots forage in the East Basin. One snowy egret and one great egret forage in the southeast channel. One double-crested cormorant dries its wings on the stormwater inlet. The occasional crow, pigeon, and/or gull flyover is observed.

1:15 pm. Crews plant to within 25 feet of the Anna's hummingbird nest. The nesting female remains on the nest with little regard to these planting activities to the north. Two mourning doves land on the west bank. The osprey returns to the site and drags its legs and talons through the water, possibly to clean them. It then begins circling the East and Central Basins and resumes

fishing. On its third dive, it catches a fish and takes it to a high-rise building across Admiralty Way to feed. One great blue heron lands at the stormwater inlet. Large raindrops start to fall; it is a cold, intermittent rain.

1:35 pm. Crews finish at the northwest peninsula and move to the northeast peninsula to place soils in the plant beds. The rain largely stops; at most a trace amount will be recorded. One great egret lands near the great blue heron at the stormwater inlet. The female hummingbird is observed on her nest. The osprey leaves its perch and resumes fishing in the East and Central Basins. On its fifth dive in the Central Basin, the osprey catches a fish. It is immediately chased by two American crows, and leaves the site with its catch to the southeast.

1:50 pm. One black phoebe is observed perched on silt fence along the southern shoreline. One yellow-rumped warbler lands in the pine next to the active Anna's hummingbird nest. The nesting female hummingbird leaves her nest for eight minutes and returns. The female's return coincides with two American crows landing in the nest tree.

2:10 pm. Planting continues past the Anna's hummingbird nest to the northeast. The female Anna's hummingbird once again leaves her nest for a few minutes before returning. One ring-billed gull lands on the stormwater inlet. One double-crested cormorant is observed fishing in the Central Basin.

2:30 pm. Work stops on the south bank of the southeast channel and that crew prepares to leave for the day. Planting continues within the nesting buffer, and crews continue to place soils on the northeast peninsula. The female Anna's hummingbird remains on her nest until work stops for the day.

2:50 pm. All crews stop work in the Basin for the day and prepare to leave the site. Crews cover stockpiles in the staging area, put away equipment, and pick up trash in preparation for the impending storm. Two American crows perch atop the construction trailer. Two house finches fly over the staging area.

3:10 pm. The biological monitor and all crew members leave the site for the day.

Additional Observations

One osprey, identified by its missing tail feather, spent some of the afternoon circling the site and catching fish. The osprey would take its catch off-site to feed. This same osprey has been seen all week and is likely the same resident individual observed previously in the Basin.

No Black Skimmers or California Least Terns were observed today. No savannah sparrows, and therefore no potential Belding's savannah sparrows, were observed either.

Construction crews planted the east bank from just to the north of the pump house to the northeast corner. Planting also occurred in small plots on the north bank, west bank (the southwest corner, in particular), and south bank (within the Anna's hummingbird nesting buffer).

One monarch butterfly was observed today. Cool temperatures, intermittent rain, and cloudy and windy conditions likely contributed to few monarch observations. No butterflies or other wildlife were harmed during construction. Construction crews were reminded to be on the lookout for any monarchs that fly into active work areas.

Approximately 2 hours and 45 minutes of construction activities occurred within the active Anna's hummingbird nest in the easternmost pine tree south of the Central Basin. Activities included removing excess concrete by hand from the curbs on the south bank and planting containerized plants. Work never came within 25 feet of the nest. All activities were conducted under the watchful eye of the biological monitor, and no signs of distress from the female hummingbird were observed. She spent most of her time on the nest and showed no signs that she aware of the work being conducted nearby. Nonetheless, construction crews were instructed to be cautious around the Anna's hummingbird nest. The biological monitor closely observed the nesting Anna's hummingbird female whenever possible. Based on the biological monitor's observations the nesting Anna's hummingbird was not disturbed by work activities nearby.

Conclusions

Based on observations made during monitoring, the following conclusions were made:

1. Biological awareness training emphasizes caution to avoid harm to birds and wildlife in and around the Basin during construction activities. In general, wildlife tends to slowly move away from an area when crews approach to conduct work activities. They return to the area once the crews move on. The crew was reminded to dispose of trash properly.
2. In general, wildlife is most active in the morning with a dramatic decrease in observed wildlife activity after 10:00 am, with the exception of American crows and gulls. Wildlife activity often increases slightly in the late afternoon.
3. No construction activities occurred in the water.
4. One monarch butterfly was observed today. The weather conditions likely contributed to the small number of butterfly observations.
5. The biological monitor observed the tolerance of the nesting Anna's hummingbird nest as he and other workers would pass by. The female was not disturbed by the nearby human foot traffic or the minor activities (e.g. planting and hand-removal of excess concrete) that occurred within the nesting buffer.
6. The number of fish surfacing and caught by osprey and wading birds confirm that fish are

entering the Basin through the tide gates.

7. One osprey, identified by its missing tail feather, has been observed fishing in the Basin every day this week. The time spent in the Basin and its aggressive behavior toward other osprey trying to fish in the Basin suggest this osprey is a resident and considers the Basin its territory.
8. The two killdeer that have been seen showing site fidelity to the northwest mudflats were driven from that location by American crows. The killdeer pair moved to the gabion peninsula in the Central Basin, where the female began exhibiting nesting behaviors. However, no eggs were laid.

Table 1 provides a list of bird species observed during biological monitoring on March 5, 2016.

Table 1. Bird Species Observed during Biological Monitoring on March 5, 2016		
Common Name	Scientific Name	Comments
American Crow	<i>Corvus brachyrhynchos</i>	Several individuals; Very common flying overhead, perching on power line poles, and exploring the basin banks
Killdeer	<i>Charadrius vociferus</i>	2 individuals observed on the northwest mudflats and gabion peninsula displaying nesting behavior
Osprey	<i>Pandion haliaetus</i>	1 individual observed fishing in the Basin
Western Gull	<i>Larus occidentalis</i>	Several individuals; Very common flying overhead
California Gull	<i>Larus californicus</i>	Several individuals observed flying overhead; not as common as western or ring-billed gulls
Ring-billed Gull	<i>Larus delawarensis</i>	Several individuals; Common flying overhead
Great Egret	<i>Ardea alba</i>	2-4 individuals foraging throughout the Basin
Snowy Egret	<i>Egretta thula</i>	1-2 individuals foraging throughout the Basin
Great Blue Heron	<i>Ardea herodias</i>	2-4 individuals foraging throughout the Basin
Mallard	<i>Anas platyrhynchos</i>	6-8 individuals foraging throughout the Basin and flying overhead
Gadwall	<i>Anas strepera</i>	4 individuals observed flying overhead
American Wigeon	<i>Anas americana</i>	3 individuals foraging and resting in the Basin
Lesser Scaup	<i>Aythya affinis</i>	17 individuals foraging and resting in the Basin
Bufflehead	<i>Bucephala albeola</i>	4 individuals foraging in the East Basin
American Coot	<i>Fulica americana</i>	2 individuals foraging throughout the Basin
Double-crested Cormorant	<i>Phalacrocorax auritus</i>	2-4 individuals observed foraging in the Basin
Rock Pigeon	<i>Columba livia</i>	Very common; observed flying overhead and on structures to the south and west of the Basin
Mourning Dove	<i>Zenaida macroura</i>	3-5 individuals observed flying overhead and along the west bank
Black Phoebe	<i>Sayornis nigricans</i>	1 individual perched along the south shoreline
Yellow-rumped Warbler	<i>Setophaga coronata</i>	Several individuals observed flying from perch to perch throughout the Basin
Townsend's Warbler	<i>Setophaga townsendii</i>	1 individual observed in trees at the pump house
Dark-eyed Junco	<i>Junco hyemalis</i>	2-4 individuals observed throughout the Basin

House Finch	<i>Carpodacus mexicanus</i>	Several individuals; common in palms along Washington Boulevard
House Sparrow	<i>Passer domesticus</i>	2-3 individuals observed along the north bank
European Starling	<i>Sturnus vulgaris</i>	4 individuals observed flying overhead
Anna's Hummingbird	<i>Calypte anna</i>	4-6 individuals observed hovering overhead or perching throughout the Basin; one active nest observed in a pine tree south of the Central Basin
Allen's Hummingbird	<i>Selasphorus sasin</i>	2 individuals observed in the northeast and southwest corners of the Basin

The following photographs show important biological monitoring observations:



Figure 1- Female Anna's hummingbird sitting on her nest.



Figure 2- After being harassed by crows on the northwest mudflats, the killdeer pair spend the rest of the day exhibiting nesting behaviors on the gabion peninsula in the Central Basin.



Figure 3 – Five species of ducks were observed foraging and resting together in the East Basin



Figure 4 – The osprey has been observed fishing in the Basin every day this week and is successful on most trips